

Power and resistance: leading change in undergraduate medical education

Kristina Sundberg¹, Anna Josephson², Scott Reeves³ & Jonas Nordquist¹

(1) Medical Case Centre, Department of Medicine (Huddinge), Karolinska Institutet, Stockholm, Sweden

(2) Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden

(3) Faculty of Health, Social Care & Education, Kingston University & St George's, University of London, UK

Corresponding author:

Name: Kristina Sundberg

Address: Medical Case Centre, Department of Medicine (Huddinge), M54, Alfred Nobels Allé 23, 168 54 Stockholm, Sweden

Phone number: 0046700917732

Email: kristina.sundberg@ki.se

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Introduction

As pointed out by the World Health Organization, a crucial step in improving health care worldwide is to increase not just the *quantity* of health professionals, but also the *quality* of health professionals. One key mechanism which makes this possible is through enhancing the quality of their education (World Health Organization 2006). Educational leaders within medical education are often responsible for developing the quality of medical education curricula; through initiating, implementing and evaluating curriculum reform and other educational reforms. It is a process of which the main intention is to raise the level of quality of medical education, and as an end result health care. (e.g. Cooke et al, 2010; Frenk et al, 2010).

In performing these tasks, leaders in medical education operate on a daily basis in a complex terrain of different interest groups (Nordquist and Grigsby, 2011) as well as heightened demands from accreditation bodies (Cooke et al, 2010). The task is very complex and an important aspect of what potentially in the long run strengthens health care and as an end result, global health. Hence, researching and using research results to create an educational organisation that supports possibilities to transform curricular visions to reality, is of high interest for not only medical students and future physicians but us all – as patients and also their family members.

Educational leadership within undergraduate medical education shares features with what is referred to as “academic leadership”, which is a well-established sub-field within the realm of leadership research (Bolman and Gallos, 2011; Kouzes and Posner, 2003; Ramsden, 1998). However, apart from the classic features of academic leadership (e.g., high levels of independence and difficulties to adjust to rapid change and get other academics/experts to move along in change processes) medical education leadership also have to adjust to characteristic features of medical education that have been identified in the literature e.g. organisational silence, the social contract with the public and specific institutional culture (Lee and Hoyle 2002; Rich et al, 2008; Souba, 2010). Still, it has been acknowledged that

these findings very rarely have been based on analysis of empirical data (Lieff and Albert, 2012). Therefore we still do not know empirically what educational leaders within medical education actually do in the process of leading change and what their experiences are of the processes.

Even though educational leadership is commonly positioned as exclusively present at the very top levels of an organisation (Kouzes and Posner, 2003), it has been identified that three levels exist within medical education: top (presidents etc.), middle (deans, chairs etc.) and line level (faculty members with leadership tasks) (Bikmoradi, 2009). Faculty members with leadership responsibilities in medical education are often the critical link between educational visions and practice, but their role in development and implementation of educational ideas and visions is underexposed within research (Lieff and Albert, 2010). Since faculty development and educational programmes targeting medical education leaders is one way of strengthening medical education leaders in their important mission (Nordquist and Grigsby, 2011; Lieff and Albert, 2012) it is important that these are based on theoretically grounded research. But even though Master level programs for medical education leaders are growing quickly in numbers worldwide (Tekian and Harris, 2012) it has been shown that there is little empirical evidence on specific leadership practices to help inform the design of educational programmes for medical education leaders (Lieff and Albert, 2012).

The experiences of educational leaders in undergraduate medical education have to date not been highlighted to any great extent within research. Hence, there is a need for increasing the number of theoretical perspectives used for conceptualising the work of educational leaders in undergraduate medical education (Nordquist and Grigsby, 2011; Lieff and Albert, 2010). The two types of theoretical leadership perspectives used the most frequently in empirically-based studies have been leader-centered perspectives (Citaku et al, 2012; Sanfey et al, 2011) such as for example Bass and colleagues' (2003) transformational leadership as well as cultural perspectives (Bland et al, 1999; Lieff & Albert, 2010; Jippes et al, 2013) such as for example Bolman & Deal's (2008) leadership framework. However, critical perspectives, such as power perspectives, have not been used in this context up until now.

The concept of power has no single definition but can instead be described as a “family resemblance concept” (Wittgenstein, 1967). The concept changes meaning in different contexts and there is simply no single definition to cover all usage; still the concepts of power used in different contexts resemble one another. There is a familiarity but no set of set characteristics in common (Haugaard, 2002). Sociologists French & Raven (1959) created a now seminal power taxonomy which classifies the concept into five different types. The taxonomy has for instance been presented as a helpful tool in clinical settings when wanting to take a closer look at the physicians’ potential for leadership and power (Gabel, 2012). However, leadership researcher Gary Yukl have adopted and further developed the French & Raven (1959) power taxonomy to also include how different sources of leader influence/power triggers different types of outcomes in the target group (Yukl, 1989; Green 1999).

(Insert Table 1. Power model – sources of leaders influence (Yukl, 1998) about here)

The framework has to our knowing not been applied to findings in medical education research before but the design, focusing both on power and potential outcomes of different types of power, provides help when taking a closer look at and narrowing down the concepts of as well as the circumstances around power and resistance. This paper will present emerging findings within the area of educational leadership in undergraduate medical education and what happens when educational leaders try to engage teachers and supervisors in the change processes.

A research intense medical university in Northern Europe serves as the backdrop for this study which focuses on the experiences of educational leaders leading change in undergraduate medical education. The aim of this study is by exploring experiences and perceptions of educational leaders within an undergraduate medical programme, contribute with research to fill the gap of missing empirical and theory-based studies on the topic. The study uses the Yukl power model (1998) on the experiences of educational leadership in undergraduate medical education and the results are aiming to highlight the situation of

being engaged in change processes of educational quality development as an educational leader in undergraduate education. The study is hence attempting to answer the question: how does leading educational change in undergraduate medical education manifest itself through power and resistance? This study represents a sub-set of data from a larger PhD research project that has explored the notion of leadership in both undergraduate medical and nursing education.

Methods

This study adopted a phenomenological approach to explore the subjective experiences of educational leaders within an undergraduate medical programme. Phenomenology is a qualitative research approach that implies in-depth explorations of individuals' experiences and understanding social phenomena from the specific perspectives of those who have experienced it (Husserl, 1931). The researcher is in this context a subjective, actively engaged facilitator in the research process (Illing, 2010).

Study-setting

The setting for this study is an undergraduate medical programme, which at the time of the data collection admitted approximately 120 students every semester and had duration of 5 years. The curriculum was introduced in 2007 and meant a transition from a traditional preclinical/clinical curriculum to an integrated, thematic curriculum. Hospital-based attachments started in year 3 of the programme (in parallel at four different hospital sites) but the students were exposed to patient contact through primary care attachments already in semester 1. The programme was divided into seven themes and had an integrative character. Educational leaders from two out of three medical educational leadership levels, middle and line level were targeted in this study (Bikmoradi, 2009).

Data collection

In September 2011 the administration office of the medical programme was approached about information on how many educational leaders that were engaged in the programme at the point of time. The advice was given to track the educational leaders with help of the official website of the programme. Out of 26 identified educational leaders within the programme (4 in dual roles) 23 were invited via e-mail to participate in the study as interviewees. 16 accepted, 1 declined and 8 did not reply.

(Insert Table 2. Interviewed educational leaders about here)

The common task of the two levels of educational leaders which makes up the sample for this study is to implement the curriculum for the undergraduate medical and to lead the teachers and/or supervisors in the programme along in the process; leading change. The sampling approach for this study was purposeful since it was designed to target educational leaders on two specific levels: middle and line level (Bikmoradi, 2009).

Data collection was conducted during December 2011- April 2012 through semi-structured interviews in Swedish and the first author (KS) conducted all the interviews. Each interview lasted approximately 40 – 70 minutes. The semi-structured form of interviews implies that questions will be specified but the interviewer can seek both clarification and elaboration on the answers given, as well as probe beyond the answers and engage in a dialogue with the interviewee. (May, 2001). Interviews are one of two common but different types (the second one being “naturally occurring” materials) of empirical material in qualitative research. Interviews can in this context be described as type of material which exposes the researcher to accounts that he/she is interested in and which otherwise would have been inaccessible (Peräkylä & Ruusuvuori, 2011).

The interview guide for the interviews was developed around two sensitizing concepts derived from the findings a review of the 2007 curriculum for the undergraduate medical programme: *power* and *resistance* in connection to leading change (Karolinska Institutet, 2010). The report of the review highlighted the fact that critical for turning visions of the 2007 curriculum into reality, was the implementation capacity of educational leaders within the medical programme structure; a lack of resources and mandate for the educational

leaders was identified (Karolinska Institutet, 2010). Sensitizing concepts are often used in social sciences as background ideas that inform the overall research problem (Charmaz, 2003) as well as drawing attention to important features of social interaction (Bowen, 2006). The concept of power is also a central concept within the social sciences such as for example sociology and political science (Haugaard, 2002).

Data analysis

All interviews were transcribed verbatim by the first author (KS), except for one (no 6) which because of technical difficulties only had been recorded half-way-through – the second half of the interview was analysed based on notes. The data analysis of the study was conducted through a theoretical, thematic analysis. Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data (Braun and Clarke, 2006). It is a data analysis method which identifies themes that capture central features about the data in relation to the research question. However, the importance of a theme is not always dependent on quantifiable measures and the process is not linear but instead going back and forth between six different phases (Braun and Clarke, 2006).

Finally, a crucial step in a qualitative analysis is the interpretation phase; qualitative research without this is just an array of ideas solely applicable to the context where the data was collected (Lingaard and Kennedy, 2010). In this study, the central meaning in the data set is found when considered through the lens of a sociological power analysis theory based on Raven & French's power taxonomy, adapted by Yukl (Yukl, 1989; Green, 1999). It is through the application of a theoretical framework that the findings will be transferable to another context; the aim is hence to achieve trustworthiness of the results (Ringsted et al, 2011).

Quality and ethics

The trustworthiness of the data during data analysis was enhanced by the involvement of three of the authors to ensure researcher/analytical triangulation. Still, triangulation is not a

tool for validation but instead an alternative to validation (Flick, 1992). However, one of the best ways to judge the quality of the findings through a purely qualitative analysis such as thematic analysis, is if new insights into the studied phenomenon has been provided or not (Vaismoradi et al, 2013). Ethical approval for this study was applied for at the local Ethics Review Board but was decided not to be required. Written informed consent was obtained from all interviewees and confidentiality guaranteed.

Results

Following the thematic analysis process described above, the main theme *power* was divided into two sub-themes: *Lack of power* and *Creation of power* (see table 1). The two sub-themes will be explored in connection to the role of having an educational leadership responsibility (such as dean, program director, theme director or course director) and leading educational change and development within an undergraduate medical education programme.

Power

Use of influence

The sub-theme *Use of influence* emerged from three underlying concepts: freedom to make changes, creation of alternative means of power and unclear mission. Methods for creating alternative usage of influence were widespread and often involved getting co-workers to buy in on ideas as if they were their own:

“Because I don’t really have any... I just can’t say ‘you are going to do this and this’ but I can say ‘I would be really good if we could do this... and I will do it in this way and it would be really good if you did it in the same manner’. One gets them to feel that it is their own decision.”

(Participant 9 – Line level leader)

Examples of strategies for creating alternative usage of influence were of several different types and involved for example engaging in co-ordination and diplomacy, involving stakeholders, gaining expert status through clinical work, using student evaluation results to encourage educational development and above all to use time to its' advantage; to put difficult or challenging decisions on hold could buy time in favour of a positive outcome.

"Student evaluations are very important and puts pressure on the units... so that you don't command and says 'this is how it should be' but maybe more propose, point at the good examples...to make the units where it's not working optimally...I guess that is a strength."

(Participant 6 – Line level leader)

The underlying concept of "Freedom to make changes" involved educational leaders on line-level expressing a large degree of freedom when it came to the area of possessing freedom of changing and developing courses and themes within the undergraduate medical programme. This was also closely connected with the perceived and expressed fact that there was a low degree of control over their work from higher levels within the educational organisation. These experiences constituted the underlying concept of *Freedom to make changes*.

"I also feel relatively free to identify learning outcomes and of course to plan the teaching so that the learning outcomes are reached. Then the degree of freedom escalates when you get to details in the course. And there... there I think that the organisation gives course leaders a big enough freedom anyway. In that very process."

(Participant 8 – Line level leader)

The underlying concept of *Unclear mission* meant that written mission statements for their positions were missing, the educational leaders were handed freedom which in turn gave them influence to develop the courses and themes according to their own interests. As one

participant noticed: *“and that is also a bit typical that it is possible to do almost anything.”*
(Participant 13 – Line level leader)

Lack of authority

This sub-theme emerged from three underlying concepts which will be described as well as illustrated by quotes from the interviewees. *Lack of traditional means of power* was an underlying concept focusing on the educational leaders not sensing to have full access to traditional means of power such as for example access to budget, time, and position in organisational structures or formal staff liability in the undergraduate medical programme.

In both the university milieu as well as the hospital environment a perceived problem was the organisational structures creating problems when trying to execute power and leading teachers and supervisors toward change for the sake of educational development.

Departmental independence was perceived to be problematic both in the case of the medical university setting as well as in the clinical context at the hospital, as indicated in the following data extract:

“That has also grown and become a problem. Especially among those teachers who also have a clinical mission, which is the main mission, so there is a conflict of interest in many cases. I then have to spend a lot of time on start off to by saying nicely that “it is a part of the mission at an academic clinic to be a part of the teaching” and further on to be a bit more precise and to say ‘this is not something that one chooses to do if you are present here, but it is something one has to do’ “.
(Participant 8 – Line level leader)

A lack of control over money and staff resources was also considered to be closely connected to the obstructing organisational structures as interviewees felt limited in their efforts to engage in developmental work in the areas of for example developing new learning activities or types of assessments. In addition, lack of staff liability over the teaching staff was a contributing fact to the sense of lack of power to influence the teachers and supervisors to engage in educational tasks.

“Yes, I guess it is that one stands before great challenges in a group that is... really has its own bosses and has an organisation that yet is pretty loosely guided.”

(Participant 11 – Line level leader)

“Educational leadership is a difficult mission to achieve with the group of teachers we have and the structure we have. And one could say... yes, it is also difficult from a resource perspective and by resources I mean time. “

(Participant 14 – Line level leader)

The underlying concept *Lack of status* was expressed through the educational leaders' perceived lack of status as leaders on the educational arena which was contrasted to being a leader in the realm of clinical work or research. Also, research within the area of medical education was referred to as having a low status among the collected research areas present at the university.

“But I think that a big part of the institution doesn't have a clue about what we... why we do it and what the objectives for pedagogy or education are at all. (...) But if the management doesn't show a really, really big interest in pedagogy, yes, well then the status will be lower than for research. Or sorry, other research. Because educational research is present too, so...”

(Participant 5 - Line level leader)

The terms of reference for being an educational leader within the undergraduate medical programme were perceived in several different ways, or not being perceived at all in some cases. This in turn contributed to the underlying concept of *Unclear mission*. What was demanded of an educational leader in the undergraduate medical programme was perceived in several different ways from having an overarching responsibility for harmonising the whole program, to not having any clear idea of what was expected from him/her or if such a document even existed: all contributed to the sub-theme *Lack of power*:

“Well... From the beginning I was a bit confused so that's why I asked the Program Director and now... What I can say is that it is above all... it's to see to it that the Programme has...works.”

(Participant 5 – Line-level leader)

“I tried to get hold of a mission statement for this position, which you usually can get when you start a new job. I am still conspicuous by its absence.”

(Participant 12 – Line level leader)

Resistance

Meeting resistance

This sub-theme emerged from three underlying concepts of *culture, identity* and *organisational obstacles*. The data indicated that the line level leaders often, and middle level leaders sometimes, experienced resistance from teachers and supervisors when trying to engage them in educational change and development.

The first concept linked to this issue was the “change resistance culture” which was regarded as difficult in connection to change and development of education in a clinical environment. Here the educational leaders often experienced resistance since clinical teachers and supervisors suffered from what was perceived as “change fatigue” and it was difficult to compete with heavy clinical workloads and time limitations:

“I mean, a lot of people are very scared of it changing: ‘things are good the way they are’. One doesn’t dare. One doesn’t dare to let something go that you believe is working pretty well. One is afraid to try anything. And like someone said... we were going to change something: ‘Yes, I’m not change-loathing but I am impoverishment-loathing’. Then it’s just like ‘moan’.

(Participant 9 – Line level leader)

“But... yes. The pattern is there in every change. Maybe there will be more about this because it is typically this institution but also I would like to say, typical health care. That all changes are... you are very, very suspicious against them”.

(Participant 4 - Middle level leader)

The educational leaders also experienced teachers and supervisors as somewhat conservative in educational matters from time to time. They also believed teachers and supervisors making appearances matter: portraying that change and development had taken place in courses etc. but going on business as usual.

“You know there is... you know one sees when one starts a bit more difficult thing, that on and off will be: ‘well this doesn’t work or ‘shouldn’t we do it in a

totally different way?', you know. There are always different people saying: 'we don't give a crap about this because it's difficult' and so on."
(Participant 15 – Line level leader)

"But it was as it usually is, it was a lot of talk and not that much walk. Then they tried to really push through changes. Yes, it is a common policy in the clinical world too to duck, and then you claim that you are doing something but you don't really change anything"
(Participant 12 – Line level leader)

"Identity" emerged as another concept linked to meeting resistance. Here the leaders described their experiences of teachers and supervisors resisting educational change and development as results of not identifying with educational matters and being educators:

"We don't have a teacher staff. We don't have any teachers. In the medical programme, the theoretical departments, we don't have any teachers. Formally we do have teachers, but they are scientists. That was how I started and that is what I am in my heart and soul, and it's the same for everybody else. Still if we enjoy teaching more or less. But all teachers don't. And you have to realise that. That's why this is such a hard institution. The career path is through research."
(Participant 14 – Line level leader)

Identity also played an important role when it came to resisting educational change and development as a fear of integration. Integration was in this context perceived as a threat to the own identity as subject expert and triggered tribalism between and inside courses and themes.

" 'We have seen so many changes', 'This is just a new craze' and 'It's better to do as we always have done it, it works', 'This could never be any good', 'Why should we limit ourselves like this when there is so much more they need to know'. And you know... they don't want to. I believe from fear to diminish their subject. The economy that goes with it. And of course the influence. And many of those are respectable, comprehensible obstacles."
(Participant 13 – Line level leader)

The final emergent concept was "organisational obstacles". Here the educational leaders expressed their concern for meeting resistance in educational change processes as a result

of both the medical university as an organisation not putting enough emphasis on education, as well as the clinical world and the medical university not sharing the same organisational shared mental model in educational matters.

“So that is probably the greatest challenge that one actually penetrates something where there really is no time and... because we have too few teaching positions. And in spite of many professors their task is not formalised enough to include a formal obligation to spend a lot on time on teaching.”
(Participant 11 – Line level leader)

“That is... there is... it is another really, really big problem that we have. That we actually have two mandators. And a lot of people are now trying to understand that this influences our... the quality of our operation. Just because our visions are so differing. The health care is supposed to produce care in a high quality and cost efficient manner. This institution has a totally different vision. We are not that guided by economy even though we will of course become it like all other organisations... to struggle when money doesn't always count up for what we want to do. But I guess it's like... health care have become more a part of... like a part of industry. A kind of health industry you know. But the universities haven't gone quite that far yet.”
(Participant 8 – Line level leader)

Discussion

As presented above the educational leaders in this study are trying to lead educational change in somewhat of a power dichotomy. Indeed, the data indicated that they are simultaneously feeling powerless and powerful and at the same time they are meeting resistance to change from teachers/supervisors within the organization.

The results from this study suggests that the educational leaders on middle and line level feel that they have very little or no access to traditional means of power when it comes to influencing the target group – teachers and supervisors – in the direction of educational development and change. This is reflected in the sub-theme “Lack of authority”. The underlying concept of “Lack of traditional means of power” shows that there is a sense among the educational leaders that no “carrots” or “sticks” are at their disposal in this situation. This feeling is also enhanced by the concept of “Unclear mission”. By not having

access to a clearly formulated mission in the role as an educational leader, this also creates an uncertainty about what means of power they have at reach in an educational change process. Without a clearly formulated mission for the leaders the lack of power also becomes very evident to the teachers and supervisors who are supposed to co-operate in the process, but not always does because of this.

These results are in alignment with Yukl's (1989) model as these educational leaders do not have access to neither "reward power" nor "coercive power" in this context. The leaders can't give any promises to give the teachers/supervisors something in reward for carrying out a task - nor can they reprimand the teachers/supervisors for not complying. As agents the leaders are lacking both of these kinds of power and the target audience, teachers/supervisors, are aware of this. The model also shows that there also isn't any mention of "referent power" being at hand for the leaders: gaining the leaders approval has not been described as a behaviour expressed by the teachers/supervisors. (see Table 2).

The related concept of lack of status suggests that the educational leaders in this study have a difficult time achieving status in an educational expert role, since the teachers and supervisors they are communicating with regard the expert role as a clinician or a researcher as more valuable. Also, many of the teachers and supervisors view themselves as clinicians and/or researchers more than educationalists which make it difficult to communicate with the educational leaders about educational change and development. When the self-image of being an educationalist is missing it is also difficult to find a common language and a common approach to use in a context of educational change and development. Hence, in alignment with the Yukl (1989) power model, there appears also to be no access to "expert power" in the role as an educational leader.

In contrast, the concepts under the sub-theme "Use of influence" paint a picture of an unclear mission that also creates freedom to act and to change and develop courses and themes without much involvement from higher levels of educational leaders. The lack of a clear mission and top-down control also stimulates creative ways of creating power at reach for the educational leaders. This with the intention in turn to get the teachers and supervisors to move along in the direction of educational change and development which can be difficult in an academic/expert environment – the phenomenon known as "herding

cats” (Bolman and Gallos, 2011). What the results point out is that the educational leaders are trying to create legitimacy and expert status in new types of ways, since their legitimacy as educational leaders is not always of worth in a context focusing on clinical work and/or research: what we would like to call a “vicarious legitimacy”. Examples from the results are that they are anxious to work clinically to gain expert status in that domain which then could create a spill-over effect into the educational domain when engaging teachers and supervisors with a clinical background. To work with tools as stakeholder engagement, interests and diplomacy are other ways of creating legitimacy around a strategy more than the actual role as the educational leader. The focus is kept of the legitimacy of the person and on the legitimacy of the cause. Another way of creating legitimacy away from the actual role as an educational leader, vicarious legitimacy, is to create legitimacy for educational change and development with the help of results from student evaluations. In this way it is possible for the educational leaders to point at the results of an instrument, the student evaluation, to keep away from the issue of their own legitimacy and still get the teachers and supervisors engaged in an educational change and development process with the help of the students’ voices. Finally, the saying “if you can’t stop it – you can always delay it” seems to be very true in the world of medical education leadership. Time and timing is often used as a way to create legitimacy for an educational change process – if it isn’t possible to do at one point in time the strategy is to wait (for personal changes etc.) until it is.

Returning to Yukl’s model (1989) we now have to modify the earlier statement about legitimate power and expert power being out of reach for the educational leaders. Legitimate power and expert power do exist at reach for educational leaders in undergraduate medical education, but not in connection to that very role. They have to gain expertise status in other areas than education (clinical and/or research expertise) or create legitimacy outside of the actual role as an educational leader to gain access to these types of power and be able to engage teachers and supervisors in processes of educational change and development. This type of alternative legitimacy we have chosen to call “vicarious legitimacy”.

In relation to resistance, as described under the heading “Power” the educational leaders do not feel that they have any access to the traditional forms of sources of leader influence that

are described in table 2. When trying to use for example legitimate power connected to the role of an educational leader as well as trying to exercise power in connection to an educational expert role, they most often meet resistance. Also, as Yukl(1989) and Green (1999) state, this would only be possible if the demands for educational change and development were to be put upon the teachers and supervisors arrogantly or improperly. This does not seem to be the case in this study. Also, according to Yukl (1989; Green 1999) expert power is only met with resistance if performed arrogantly or the target audience (teachers and supervisors) are opposing the task goals. Again, wide-spread arrogance among educational leaders seems to be ruled out as an option but not having a shared vision of the task goals between the educational leaders and the teachers/supervisors is a concept that we can find in the results from the theme “Resistance”.

In the sub-theme “Meeting resistance” the underlying concepts of culture, identity and organisational obstacles are all contributing to the fact that educational leaders are not sharing the same goals in an educational change and development process as the teachers and supervisors. “Change fatigue” makes the educational goals less and less important over time for teachers and supervisors and conservatism in educational matters are also a contributing factor to not making educational change and development goals their number one priority. But the probably strongest factor contributing to resistance is the fact that a lack of a shared educational identity between educational leaders on one side and teachers/supervisors on the other side, leads to a lack of shared goals. And when educational goals such as “integration” poses a threat to teachers/supervisors own expert status, then resistance is inevitable.

Hence, in contrast to the outcomes of Yukl’s power model (1998; Green, 1999) resistance is not only possible but likely in the world of undergraduate medical education leadership when exercising conventional legitimate and expert power in connection to the educational leadership role. And it is not the results of arrogant leadership attitudes, but instead the result of lacked common educational goals and joint educational identity between the educational leaders and the teachers/supervisors. The solution to overcome this resistance that the educational leaders have produced is to invent new versions of expert and legitimate power, “vicarious legitimacy”, which are disconnected from the traditional educational leader role.

As with all research this study contains a number of limitations. For example as the first author (KS) conducting the interviews was also the handling officer of the curriculum review for the undergraduate medical education programme at the study institution. This is also a small study conducted at one institution in Northern Europe, so there may be limitations on the applicability to other institutions. Since the study is based on data extracted from interviews there may also be a possibility of participants' restrictions in ability to remember correctly or being non-biased when recalling events. Ethical approval for the study has been applied for at the local Ethical Review Board but was decided not to be required.

Conclusions and implications

This study has highlighted the perceptions and the experiences of educational leaders trying to lead educational change and development processes in undergraduate medical education. In applying a conceptual framework of power the study has also indicated how educational leaders have to distance themselves from the role as an educational leader to be able to make educational change happen, as well as overcome resistance from teachers and supervisors. The study shows that this is made possible through creating alternative legitimate power as well as gaining expert power in other domains than the educational, such as the clinical and the research domain; creating a vicarious legitimacy. Resistance from teachers and supervisors to educational change and development is to a large extent based on identity issues - their identity as subject experts can be threatened by change and they also often identify more with being a clinician or a researcher than being a teacher/supervisor. Identity is also a key feature in the power dilemma – creating a vicarious legitimacy not focusing on educational leadership seems to be a survival strategy developed in a sometimes educational non-friendly environment for creating the best results in an educational change and development process.

A practical outcome of the results of this study should be the evident impact of what a missing clear mission has on educational leadership. The study shows that the absence of a clear mission creates several legitimacy problems for the educational leaders when trying to lead change among teachers/supervisors. At the same time the educational leaders seem to somewhat enjoy the creative independence and freedom that this very absence brings. So

even if introducing a well-documented mission and a clear authoritarian mandate in the role as an educational leader in an undergraduate medical programme could lead to a somewhat easier task, it would also mean a limitation of freedom for the educational leaders which one must be aware of.

Research results from this study can be used to develop faculty development programs for health education leaders on a national and international level. Health professions educational leaders are often excellent clinicians or scientists before going into an educational leadership position, but not always prepared sufficiently to tackle often very complex educational leadership issues (Nordquist & Grigsby 2011). By educating our health professions educational leaders they will be able to play a more active and empowered role in the process from curriculum visions to learning in practice. New perspectives on the educational leadership role will help us create high quality undergraduate medical education for our students of the future.

References

Bass, B., Avolio, B., Jung D. & Berson, Y. (2008) Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88: 207-18

Bikmoradi, A. (2009). *Exploring academic leadership in medical schools and universities in Iran*. Dissertation. Karolinska Institutet

Bland, C., Starnaman, S, Hembroff, L., Perlstadt, H., Henry, R. & Richards, R. (1999) Leadership behaviors for successful university – community collaborations to change curricula. *Academic Medicine*, 74: 1227-1237

Bolman, L. & Deal, T. (2008) *Reframing organizations: artistry, choice, and leadership*. (San Francisco: Jossey-Bass)

Bolman, L. & Gallos, J. (2011) *Reframing academic leadership*. (San Fransisco: Jossey-Bass)

Bowen, G.A. (2006) Grounded theory and sensitizing concepts. *International Journal of Qualitative Methods*, 3, 1-9

Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101

Charmaz, K. (2003) Grounded theory: Objectivist and constructivist methods (In Denzin, N. & Lincoln, Y. (Eds.) *Strategies for qualitative inquiry*. (pp. 249-291) Thousand Oaks, CA: Sage)

Citaku F, Violato C, Beran T, Donnon T, Hecker, K, Cawthorpe, D. (2012) Leadership competencies for medical education and healthcare professions: population-based study. *BMJ Open*, DOI:10.1136/bmjopen-2012-000812

Cooke, M., Irby, D. & O'Brien, B. (2010) *Educating physicians. A call for reform of medical school and residency*. (San Fransisco: Jossey-Bass)

Flick, U. (1992) Traingulation revisited: Strategy of validation or alternative? *Journal for the Theory of Social Behavoieur*, 2, 175-197

French, J. & Raven, B.H. (1959) *Studies of social power*. (Ann Arbor: Institute for social research.)

Frenk J., Chen L., Bhutta Z.A., Cohen, J., Crisp, N., Evans, T., Fineberg, H., Garcia, P., Ke, Y., Kelley, P., Kistnasamy, B., Meleis, A., Naylor, D., Pablos-Mendez, A., Reddy, S., Scrimshaw, S., Sepulveda, J., Serwadda, D. & Zurayk, H. (2010) Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet*, 376, 1923-58

Gable, S. (2012) Power, leadership and transformation: the doctor's potential for influence. *Medical Education*, 46, 1152-1160

Green, D. (1999) Leadership as a function of power. *Proposal Management*. Fall 1999, 54-56

Haugaard, M. (2002) *Power: a reader*. (Manchester: Manchester University Press)

Husserl, E. (1931) *Ideas: General introduction to pure phenomenology*. (London: George Allen & Unwin)

Illing, J (2010) Thinking about research (In Swanick, T. (Ed.) *Understanding Medical Education. Evidence, Theory and Practice*. (pp. 283-300) Chichester: Wiley-Blackwell)

Jippes, M., Driessen, E., Majoor, G., Gijsselaers, W., Muijtjens, A. & Van der Vleuten, C. (2013) Impact of national context and culture on curriculum change: a case study. *Medical Teacher*, 35, 661-670

Karolinska Institutet (2010) *Report- review of the new undergraduate medical programme at Karolinska Institutet and evaluation of the early stages of implementation*. (Stockholm: Karolinska Institutet)

Kouzes, J. & Posner, B. (2003) *The leadership practices inventory (LPI)*. (San Fransisco: Jossey-Bass)

Lee, A. & Hoyle, E. (2002) Who would become a successful dean of faculty of medicine: academic or clinician or administrator? *Medical Teacher*, 24, 637-641

Lieff, S. & Albert, M. (2010) The mindsets of medical education leaders: how do they conceive of their work? *Academic Medicine*, 85, 57-62

Lieff, S. & Albert, M. (2012) What do we do? Practices and learning strategies of medical education leaders. *Medical Teacher*, 34, 312-319

Lingard, L. & Kennedy, T. (2010) Qualitative research methods in medical education (In Swanwick, T. (Ed.) *Understanding Medical Education. Evidence, theory and Practice*. (pp. 323-335) West Sussex: Wiley-Blackwell)

May, T. (2001) *Social Research. Issues, Methods and Process*. (Maidenhead: Open University Press)

Nordquist J, Grigsby RK. (2011) Medical schools viewed from a political perspective: how political skills can improve education leadership. *Medical Education*, 45, 1174-80

Peräkylä, A. & Ruusuvuori, J. (2011) Analyzing talk and text (In Denzin, N. & Lincoln Y. (Eds.) *The Sage Handbook of Qualitative Research*. (pp. 529-543) Thousand Oaks: Sage)

Ramsden, P. (1998): *Learning to lead in higher education*. (London: Routledge)

Rich, E., Magrane, D. & Darrell, K. (2008): Qualities of the medical school dean: insights from the literature. *Academic Medicine*, 83, 483-487

Ringsted, C., Hodges, B. & Scherpiers, A. (2011) 'The research compass': an introduction to research in medical education: AMEE guide no. 56. *Medical Teacher*, 33, 695-709

Sanfey, H, Harris I, Pollart S & Schwartz, A. (2011) Evaluation of the University of Virginia leadership in academic medicine program. *Teaching and Learning in Medicine*, 23: 347-358

Souba, C. (2010) The language of leadership. *Academic Medicine*, 85, 1609:1618

Tekian A. & Harris, I. (2012) Preparing health professions education leaders worldwide: a description of masters-level programs. *Medical Teacher*, 34, 52-58

Vaismoradi, M., Turunen, H. & Bondas, T. (2013) Content analysis and thematic analysis: Indications for conducting a qualitative, descriptive study. *Nursing and Health Sciences*. 15, 398-405

Wittgenstein, L. (1967) *Philosophical Investigations*.(Oxford University Press: Oxford)

World Health Organization (2006) *The World Health Report – Working Together for Health*. (Geneva: World Health Organization)

Yukl, G. (1998) *Leadership in organizations*. (Prentice Hall Canada: Toronto)